



ADRE *for Windows*TM

and the Data Acquisition Interface Unit (DAIU)

*by Bob Hayashida
Marketing Specialist
Bentley Nevada Corporation*

Now available, ADRE[®] for Windows[™] and the DAIU Data Acquisition Interface Unit are the latest additions to the ADRE[®] family of diagnostic products. Products within the ADRE[®] family have always provided the power and features to help you solve the most challenging rotating machinery problems. These new products represent the most technologically advanced portable diagnostic equipment for rotating machinery. In addition to diagnostic capabilities, we have also concentrated on productivity and efficiency. This means more effective use of valuable resources.

This latest generation of full-function portable diagnostic equipment demonstrates our commitment to providing tools that solve problems. Bentley Rotor Dynamics Research Corporation is continuously developing and refining our understanding of rotating machinery behavior. This knowledge, gained

through years of research and application, is applied to our products.

We learned from experience, yours and ours. ADRE[®] for Windows incorporates more than ninety-five percent of features requested by ADRE 3 users. Here are some of those features and capabilities:

Real time data display

- Displays transient and steady state data in familiar plot formats as it is captured

User-interface

- Software designed for Microsoft Windows graphical operating environment

Improved portability

- The DAIU is now smaller and lighter and is powered by AC or internal battery. The DAIU interfaces directly into the expansion port of the COMPAQ LITE family of notebook computers.

Improved data resolution

- Up to 128 samples per shaft revolution

Increased data capacity

- Up to 1280 vector samples and 128

waveform samples per channel for 8/16 channels of simultaneous data acquisition

Reduced download time

- Data is captured and downloaded directly into the computer's memory as it is taken.

Vector data

- Simultaneous 1X, 2X, and nX filtered vectors (amplitude and phase)

nX vector data

- nX vectors can be integer values from 1 to 15 or subsynchronous values between 0.2 - 1.0

Flexible triggering

- Initiate data acquisition by a change in amplitude, phase, process variable, speed, time, pre-programmed date/time or shutdown detection circuit

Multiple shaft speeds

- Two Keyphasor[®] inputs are provided

Process data input

- The DAIU will accept 4-20 mA, 1-5 Vdc & 0-10 Vdc inputs

Flexible spectral capability

- Asynchronous spectral resolution

is selectable (50, 100, 200 or 400 lines)

High resolution spectral data

- 3200 lines are available for two channels simultaneously

New plot formats

- Plus Orbits, XY graph (*variable versus variable**), multiple plots, Current Values

Enhanced plot scaling

- On-screen re-scaling, selectable auto-scaling

Data analysis & correlation

- Colored data ranges, active cursor, vector data arithmetics, data file export to spreadsheets

Enhanced hardcopy output

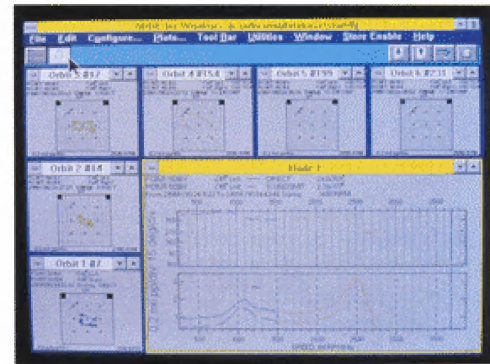
- Color printer support

Powerful? Of course. Today, however, there is a need to do more with less. ADRE® for Windows™ and the DAUI allow you to work smarter and more efficiently. By incorporating features and capabilities of oscilloscopes, spectrum analyzers and recording instruments into ADRE® for Windows™ and the DAUI, this type of additional equipment is typically not needed. ADRE® for Windows™ allows you to view two plots as data is being captured. For example, filtered and/or unfiltered Orbits/Timebase waveforms, Spectrum data, Current Values, and much more! ADRE® for Windows™ imports existing ADRE® 3 data. A software utility downloads data directly from the 108 Data Acquisition Instrument to the computer for display and analysis in ADRE® for Windows™. This ensures that existing tools can continue to be used.

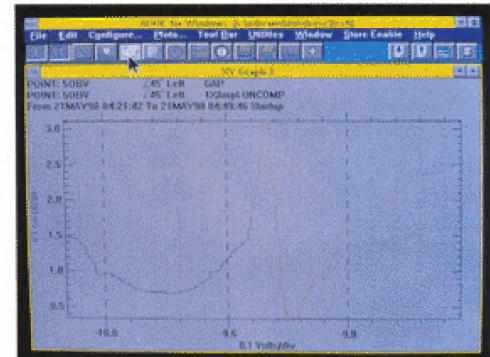
ADRE® for Windows™ means that sharing information has just become easier. Data can be exported as HPGL files, in spreadsheet format, or through the Windows Clipboard. Comprehensive analysis and report generation have never been easier. This means getting the right information, in the proper format, to the people who need to know.

* This new plot format enables you to plot a variable associated with one channel against another variable from any other channel. For example, 1X amplitude versus valve position. ■

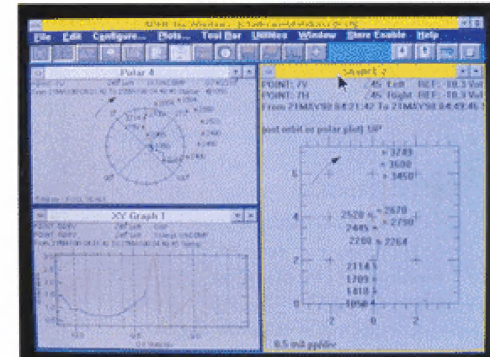
Bode plot with "Plus Orbits"



XY graph 1X amplitude versus gap



Multiple plots (XY graph, Polar plot & Shaft Average Centerline Plot)



Report generation with a word processor

